

POSITION DESCRIPTION

Position Title:	Postdoctoral Research Fellow/Research Fellow
Organisation Unit:	Australian Institute for Bioengineering and Nanotechnology
Position Number:	NEW
Type of Employment:	Full time, Fixed-term
Classification:	Research Academic Level A or B

THE UNIVERSITY OF QUEENSLAND

The University of Queensland (UQ) contributes positively to society by engaging in the creation, preservation, transfer and application of knowledge. UQ helps shape the future by bringing together and developing leaders in their fields to inspire the next generation and to advance ideas that benefit the world. UQ strives for the personal and professional success of its students, staff and alumni. For more than a century, we have educated and worked with outstanding people to deliver **knowledge leadership for a better world**.

UQ ranks in the world's top universities, as measured by several key independent ranking, including the Performance Ranking of Scientific Papers for World Universities (43), the US News Best Global Universities Rankings (45), QS World University Rankings (48), Academic Ranking of World Universities (55), and the Times Higher Education World University Rankings (69). UQ again topped the nation in the prestigious Nature Index, and our Academic Ranking of World Universities result in the field of Life and Agricultural Sciences is the highest in Australia at 20.

UQ has an outstanding reputation for the quality of its teachers, its educational programs and employment outcomes for its students. Our students remain at the heart of what we do. The UQ experience – the UQ Advantage – is distinguished by a research enriched curriculum, international collaborations, industry engagement and opportunities that nurture and develop future leaders. UQ has a strong focus on teaching excellence, winning more national teaching excellence awards than any other in the country and attracting the majority of Queensland's highest academic achievers, as well as top interstate and overseas students.

UQ is one of Australia's Group of Eight, a charter member of edX and a founding member of Universitas 21, an international consortium of leading research-intensive universities.

Our 50,000-plus strong student community includes more than 13,000 postgraduate scholars and more than 12,000 international students from 144 countries, adding to its proud 240,000-plus alumni. The University has about 7,000 academic and professional staff and a \$1.8 billion annual operating budget. Its major campuses are at St Lucia, Gatton and Herston, in addition to teaching and research sites around Queensland and Brisbane city. The University has six Faculties and four University-level Institutes. The Institutes, funded by government and industry grants, philanthropy and commercialisation activities, have built scale and focus in research areas in neuroscience, biomolecular and biomedical sciences,

sustainable minerals, bioengineering and nanotechnology, as well as social science research.

UQ has an outstanding track-record in commercialisation of our innovation with major technologies employed across the globe and integral to gross product sales of \$11billion+ (see <http://uniquet.com.au/our-track-record>).

UQ has a rapidly growing record of attracting philanthropic support for its activities and this will be a strategic focus going forward.

Organisational Environment

The University of Queensland's Australian Institute for Bioengineering and Nanotechnology (AIBN) is a dynamic multi-disciplinary research institute dedicated to developing technology to alleviate societal problems in the areas of health, energy, manufacturing and environmental sustainability. AIBN brings together the skills of more than 450 world-class researchers complimented by an extensive suite of integrated facilities, working at the intersection of biology, chemistry, engineering and computer modelling. With a reputation for delivering translational science, AIBN conducts research at the forefront of emerging technologies, and has developed strong collaborations with leading members of industry, academia and government. AIBN goes beyond basic research to develop the growth of innovative industries for the benefit of the Queensland and Australian economies.

Our people are our greatest asset. We offer collaborative, inclusive work and study places, which are enriched by the significant diversity of our staff, students and community. We genuinely believe that creativity and innovation flourishes in an environment where people feel supported, valued and empowered. Mutual respect, inclusivity and accountability are at the cornerstone of UQ's culture.

AIBN is committed to supporting the career growth of women researchers and have a number of initiatives to support women in developing and achieving a fulfilling research career at the institute. For more information, please visit our AIBN Women in Science web site at <http://www.aibn.uq.edu.au/women>.

Information for Prospective Staff

Information about life at UQ including staff benefits, relocation and UQ campuses is available at - <http://www.uq.edu.au/current-staff/working-at-uq>

The University of Queensland [Enterprise Agreement](#) outlines the position classification standards for Levels A to E.

DUTY STATEMENT

Primary Purpose of Position

This position is part of a collaboration between the AIBN and the Commonwealth Scientific and Industrial Research Organisation (CSIRO). The CSIRO is Australia's national science research agency whose mission is to solve the greatest scientific and technological challenges facing Australia and the world.

The position will be focussed on the engineering of proteins and biologics for development of biomolecular tools such as biosensors, bio-nanomaterials, nanoyeast, phage display and other potential technologies for application in molecular sensing of various diagnostic targets.

Duties

Duties and responsibilities include, but are not limited to:

Research

- Develop a research program focused on synthetic biology and the bioengineering of proteins/biologics for application in Remote Molecular Sensing, Biosensing and Diagnostics
- Develop research focusing on the design and application of phage and yeast display systems for rapid discovery of novel protein binders for diagnostic targets.
- Actively protect new intellectual property arising from the project
- Conduct independent, innovative research and publish scholarly papers in leading research journals
- Work with colleagues and postgraduates in the development of joint research projects

Teaching and learning

- Supervise Masters and PhD research projects in bioengineering and protein design strategies.
- Consult with students at all levels, including vacation and visiting scholars where required.

Service and Engagement

- Contribute to the processes that enable the academic team to manage the work of the Institute, including participate in Institute decision-making and serve on Institute committees
- Foster the Institute's relations with industry, government departments, professional bodies and the wider community.
- Any other duties as reasonably directed by your supervisor

For appointment to Level B

Duties as listed above, in addition to the following:

- Seek external funding for the project from granting agencies and industrial partnerships
- Engage with academic, CSIRO and industry partners to evolve and grow existing and future collaborations in the biosensing and diagnostic fields.

Other

Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including but not exclusive to:

- The [University's Code of Conduct](#)

- Requirements of the Queensland occupational health and safety (OH&S) legislation and related [OH&S responsibilities and procedures](#) developed by the University or Institute/School
- The adoption of sustainable practices in all work activities and compliance with associated legislation and related University [sustainability responsibilities and procedures](#)
- Requirements of the Education Services for Overseas Students ACT 2000, the National Code 2007 and associated legislation, and related [responsibilities and procedures](#) developed by the University.

Organisational Relationships

The position reports to the Professorial Research Fellow.

SELECTION CRITERIA

- PhD in the area of protein bioengineering, synthetic biology and / or molecular biology
- Demonstrated expert knowledge in the areas of synthetic biology, protein bioengineering, protein expression and analysis, biosensor development, gene engineering/molecular biology and protein discovery using phage/yeast display platforms
- A track record of innovative and independent research
- An ability to establish relationships and to represent and promote academic discipline at a university and wider community level, including industry, government and professional bodies
- Ability to work collaboratively with colleagues.
- Commitment to upholding the University's values, and with the outstanding personal qualities of openness, respectfulness and integrity

For Appointment at Level B

Selection criteria as listed above, in addition to the following:

- Selection criteria as listed above, in addition to the following:
- Demonstrated national recognition in the fields of synthetic biology, protein bioengineering or molecular biology
- Evidence of a contribution to research, including publication of high impact peer reviewed journal articles and successful external grant applications that support independent and collaborative research
- Evidence of effective supervision of Honours and Higher Degree by Research students.

Seminar

Applicants invited for interview may be expected to present a seminar in conjunction with the selection interview process.

Qualification Verification

An appointment to this position is subject to the verification of the highest academic qualification from the conferring institution.

The University of Queensland values diversity and inclusion and actively encourages applications from those who bring diversity to the University. Please refer to the University's Diversity and Inclusion webpage (<http://www.uq.edu.au/equity>) for further information and points of contact if you require additional support.

This role is a full-time position; however flexible working arrangements may be negotiated.

Accessibility requirements and/or adjustments can be directed to AIBN HR at aibnhr@uq.edu.au.